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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,547	09/22/2003	John H. Sohl III	36507-193186	5549

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EXAMINER	
HOLLINGTON, JERMELE M	

ART UNIT	PAPER NUMBER
2829	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,547	SOHL ET AL.	
	Examiner	Art Unit	
	Jermele M. Hollington	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/05.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

Terminal Disclaimer

2. The terminal disclaimer filed on August 26, 2005 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of U. S. Patent Application 10/666,558 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claim 3-4, 6-9, 12, 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the claim provides for the use of MIP sensor adapted to be coupled with a push and hammer systems, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Regarding claim 4, the claim provides for the use of MIP sensor, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Regarding claims 6-7 are rejected under 35 U.S.C. 1 12, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP 2172.01. The omitted structural cooperative relationships are: the location of the membranes and to what they are attached.

Regarding claim 8, the term "increase likelihood" in the claim is a relative term, which renders the claim indefinite. The term "collection" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention. The sensor either works to collect volatile organic mass or it does not.

Regarding claim 9, the term "watertight integrity" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention. The sensor either has watertight integrity or it does not.

Regarding claim 12, the term "conductivity nose assembly" is vague and indefinite and is not defined by the claim or the specification.

Regarding claim 17, the applicant has not explained how the chromatographic methods can be used for calibration.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-5 are rejected under 35 U.S.C. 102(a) as being anticipated by Christy (A Permeable Membrane Sensor For The Detection of Volatile Compounds in Soil).

Regarding claims 1-5, Christy [see Figs. 1-3] disclose a membrane interface probe housing having a diameter of at least about 2.125 inches [see paragraph 1 under System Description on page 1] couple to a rod system (wiring cavity) or a push and hammer system [see paragraph 1 under System Description on page 1] for low side wall support drive rod string applications [see Introduction] and comprises two permeable membrane (membrane and membrane block).

7. Claims 6-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Adriany et al (6405135).

Regarding claim 6-8, Adriany et al disclose a membrane interface probe apparatus [see Fig. 3] comprising a membrane interface probe is to provide circumferential sensing (see column

2, lines 28-41) as a series of sensors may be placed in a circle. The probe is also operative to increase likelihood of collection of volatile organic mass (see column 2, lines 44-46).

Regarding claim 9, Adriany et al disclose a membrane interface probe apparatus [see Fig. 3] comprising a membrane interface probe comprising at least one of a waterproof electrical coupling (38 and 52) and/or an O-ring mechanical couplings (42), wherein at least one of said waterproof electrical coupling (38 and 52) and/or said O-ring mechanical couplings (42) improve watertight integrity.

Regarding claim 10, Adriany et al disclose a membrane interface probe apparatus [see Fig. 3] comprising modular membrane interface probe comprising a plurality of modular components can be replaced on site for malfunctioning components (see column 8, lines 1-3).

Regarding claim 11, Adriany et al disclose modular MIP comprising an external barrel having a cavity (30).

Regarding claim 12, Adriany et al disclose a removable conductivity nose assembly (28).

Regarding clam 13, Adriany et al disclose a field-insertable removable cartridge-heating element (86).

Regarding claim 14, Adriany et al disclose modular MIP comprising at least one of a waterproof electrical coupling (38 and 52) and/or O-ring mechanical couplings (42).

Regarding claims 15-16, Adriany et al disclose a membrane interface probe comprising a removable trap (28) (see column 8, lines 1-3) that traps volatile organic compounds (see column 8, lines 7-10).

Regarding claim 18, Adriany et al disclose means (removable trap 28) for trapping concentrating of volatile organic compounds during sampling and logging events.

Regarding claim 19, Adriany et al disclose a membrane interface probe comprising a heated transfer line (86) from a body of said MIP to surface detector suite (44).

Regarding claim 20, Adriany et al disclose [see Fig. 3] a membrane interface probe, an enhanced scanning module (34, 10, 48, 44), and a sample introduction system (16).

Regarding claim 21, Adriany et al disclose [see Fig. 3] a membrane interface probe, a global positioning system (16), and a data acquisition system (10, 34, 44, 48).

Regarding claim 22, Adriany et al disclose probe system comprising a membrane interface probe comprising a mobile device (10) in communication with a data acquisition system (34, 48) enabling near real time transfer of data from the MIP sensor to a base station (18).

Regarding claims 23-24, Adriany et al disclose mobile device (10) comprises a control module (16) wherein the device (10) is portable.

Regarding claims 25 and 28, Adriany et al disclose the enhanced scanning module comprises a flow control subsystem (34) coupled to a detector subsystem (10), a dryer/moisture separator subsystem (48), a sampling subsystem (44) and a software control subsystem (16) connected to the detector subsystem (see column 3, lines 46-48).

Regarding claims 26 and 30, Adriany et al disclose the sampling subsystem (44) comprises an absorbent trap (46).

Regarding claims 27 and 31, Adriany et al disclose the enhanced scanning module further comprises a power supply (62), a bypass module (see Fig. 1 path 19-22 or 19-20), and a feedback signal (see abstract lines 12-16).

Regarding claim 29, Adriany et al disclose the software control subsystem (16) is coupled to the dryer/moisture separator subsystem (48).

Regarding claims 32-33, Adriany et al disclose the enhanced scanning module can be reconfigured (see column 8, lines 1-3) and comprises a plurality of operator-selectable modes (see column 6 lines 29-36) and a plurality of pre-programmable modes (see column 6, lines 13-14).

Regarding claim 34, Adriany et al disclose an interface between the detector subsystem (10) and a gas handling subsystem that allows insertion of a flow path (44), an exhaust (40), a feedback (52), and a trap (46).

Regarding claim 35, Adriany et al disclose the software control subsystem (16) comprises a data logger (Fig. 1 part 21), a sequencer (Fig. 5 part 76), a monitor (Fig. 1 part 18), a display (see column 8, lines 32-34) and a recording function (see column 10, line 29).

8. Claims 20 and 25-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Robbat (5970804).

Regarding claim 20, Robbat discloses [see Fig. 8d], a membrane interface probe system comprising a membrane interface probe (653), an enhanced scanning solutions module (600) and a sample introduction system (643).

Regarding claims 25 and 28, [see Fig. 8d] Robbat discloses the enhanced scanning solutions module (600) comprises a flow control subsystem (607) coupled to a detector subsystem (605), a dryer/moisture separator subsystem (603), a sampling subsystem (601) and a software control subsystem (639, 667, 679).

Regarding claims 26 and 30, Robbat discloses the sampling subsystem (601) comprises an absorbent trap.

Regarding claims 27 and 31, Robbat discloses the enhanced scanning solutions module further comprises an exhaust (635) and a power supply (667).

Regarding claim 29, Robbat discloses the software control subsystem (639, 667, 679) is coupled to the dryer/moisture separator subsystem (603).

Regarding claims 32-33, Robbat discloses the module can be reconfigured and comprises a plurality of operator-selectable modes and a plurality of pre-programmable modes (column 10 lines 1-11).

Regarding claim 34, Robbat discloses an interface between the detector subsystem (605) and a gas handling subsystem that allows insertion of a dryer (column 24, lines 35-37).

Regarding claim 35, Robbat discloses the software control system (639, 667, 679) comprises a data logger (column 9, line 55).

Conclusion

The examiner will like to note that claims dealing with the limitation "adapted to" has been held that the recitation that an element is "adapted to" perform is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense.

Base on the amendment to claims, the following is being provided.

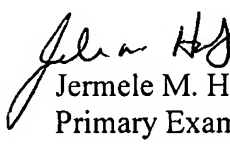
9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:30 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (517) 272-2034. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jermele M. Hollington
Primary Examiner
Art Unit 2829

JMH
November 14, 2005